World Applied Sciences Journal 20 (2): 190-197, 2012
ISSN 1818-4952

DOI: 10.5829/idosi.wasj.2012.20.02.1832

Assessment a Model of Financial Satisfaction Predictors: Examining the Mediate Effect of Financial Behaviour and Financial Strain

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Abstract: Satisfaction with one's financial status can enhance personal satisfaction and more broadly, life satisfaction and in contrast financial difficulties and dissatisfaction with one's financial status can lead to stress and depression. Research related to financial satisfaction revealed financial behaviour has a major contribution to satisfaction or dissatisfaction with financial situation. More importantly it is documented that financial behaviour is affected by other factors such as the level of financial literacy, financial attitude, childhood consumer experiences, influence of primary and secondary socialization agents as well. The purpose of this study is to assess factors predict financial satisfaction and furthermore examining the mediate effect of financial behaviour on the relationship between financial literacy, financial attitude, childhood consumer experiences, influence of primary and secondary socialization agents and financial satisfaction. A sample of 700 university students from 11 universities (six Public and five private) were selected using stratified sampling method. Data was collected by self-administered questionnaire. The research estimated model was tested using Structural Equation Modelling (SEM) through AMOS and the mediation approach of Baron and Kenny (1986) using Amos was applied to assess the mediating effect of financial behaviour and financial strain. Results indicated that financial attitude, childhood consumer socialization, socialization agents, financial literacy, financial behaviour and financial strain contribute to predict financial satisfaction. Furthermore the mediation effect of financial behaviour was examined.

Key words: Financial satisfaction · Financial strain · Financial behaviour · Financial literacy · Financial attitude · Childhood consumer experiences · Primary socialization agents · Secondary socialization agents

INTRODUCTION

Financial satisfaction and its impact on the quality of life have received considerable attention in recent decades. Satisfaction with one's financial status can enhance personal satisfaction and more broadly, life satisfaction [1] and in contrast financial difficulties and dissatisfaction with one's financial status can lead to stress and depression. Financial affairs are known to be the main determinant of satisfaction which a large number of studies have attempted to identify the dimensions of financial satisfaction and financial behaviour among various groups in relation to the development of personal financial well-being. Joo [2] defined financial satisfaction based on the subjective appraisals of one's financial situation as ‘‘a state of being financially healthy, happy and free from worry’’. The research findings of Joo and Grable [3] revealed that financial satisfaction is determined both directly and indirectly, with diverse factors, including financial behaviour, financial stress levels, income and financial knowledge. A person’s ability to manage their money is essential for being successful in life. Financial behaviour has been identified as the main determinant of one’s financial satisfaction [4, 2, 5], which, in turn, is influenced by other major factors, such as past experiences during childhood, influence of financial socialization agents and financial literacy and capabilities. Young adults, particularly university students, receive more attention from financial educators [6, 7, 8, 9], as they have easier access to financial sources, such as credit, debt and educational loans, than previous generations of students. University students may be considered as a

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high-risk group based on economic stability and, consequently, well-being, due to their propensity to borrow to fund their college education. Recent college graduates carry a considerable debt load and financial problems at the time when they have just begun working with starting salaries [10]. Xiao [11] indicated that common financial behaviour includes practices relating to cash, credit and savings management [12], for which an effective behaviour to improve financial satisfaction is to refer to positive or desirable behaviour recommended by consumer economists. However, failure to manage personal finances can have serious long-term, negative social and societal consequences [13]. While several studies have been done on financial satisfaction, but there is limited empirical examination of these factors in young adult samples specifically among college students. The available evidence suggests that more young adults (young executives) are experiencing problems in managing their finances. There are increases in non-performing loans, credit card debt and bankruptcies among individuals in Malaysia despite the on average 7.4% per annum increase in mean household income, which exceeded the real Growth Domestic Product (GDP) growth (Bank Negara Malaysia, 2011a). The credit card outstanding balance increased from RM1,924 (USD620) million to RM29,892 (USD9,642) million between 1994 and April 2011 (Bank Negara Malaysia, 2011b).In bankruptcy cases, a total of 19,167 individuals in Malaysia were declared bankrupt in 2011 (Bank Negara Malaysia, 2011c), which is a two-fold increase compared to 1988. The credit card outstanding balance increased from RM1,924 (USD620.45) million to RM12,329 (USD3977.10) million between 1994 and April 2005 (Malaysian Central Bank, 2005). In bankruptcy cases, a total of 15,868 individuals in Malaysia were declared bankrupt in 2005 (Malaysian Central Bank, 2006), which is a two-fold increase compared to 1988. In addition, statistics from the Department of Insolvency show that as of May 2009 about 46.4% of individuals declared bankrupt were among young executives below the age of 30. Recent data reveals that the collective number of bankruptcy cases reached 217,577 nationwide as of May 2010. Based on the recent trend it is possible to assume that college students are financially at risk.

Prior literature has shown that several factors contribute to predicting financial satisfaction, such as financial behaviour [14], personal values and attitude [15, 16, 17], childhood consumer experiences and financial socialization [18, 19, 20, 14] and financial literacy [21, 20]. However, relatively little is known about the mediating effect of the financial behaviour. Understanding more on the multidisciplinary factors of financial satisfaction may help college students manage their finances better. College students are the primary focus of the present study, since they are the future career and labour force contributors and for which low savings and experiencing financial problems during college life have a significant effect on their present and future family and career life. Therefore, it is important to identify factors that predict financial satisfaction among university students, which involves substantial implications for the design and implementation of practical financial programmes for young adults (college students), which, in turn, affects motivation, financial well-being and overall life satisfaction including academic achievement. Furthermore, knowledge of financial matters among university students may help to inform parents, family members and financial educators who seek to encourage, teach and otherwise assist youth with important and inevitable financial choices before entering the job market.

MATERIALS AND METHODS

Measurements

Financial Satisfaction: Financial satisfaction was measured by adopting the 6-item financial satisfaction instrument introduced by Lown and Ju [22]. Respondents were asked to subjectively evaluate major areas of financial concerns, including six items. Measurement included items such as “amount of saving”, “financial management skills” and “current financial situation”, “ability to meet wants”, “saving for emergency needs’ and “affordability to spend”. A self-anchoring ladder that was originally developed by Cantril [23] and used by Porter and Garman [24], measured the perceived financial well-being subjectively. In this measure, 1 refers to being dissatisfied and 10 refer to being satisfied.To enhance the fitness of the construct one item was dropped (Table 1). The reliability of the scale was .893.

Financial Behaviour: To measure financial behaviour, two main dimensions including savings and spending behaviour were considered. To measure spending behaviour an instrument was developed, which included 11 items requiring students to confirm whether they spent their money on those items using a Yes or No scale. The items included, mobile phone, Internet café, entertainment magazines, movies, games (Bowling, Snooker), beauty salon, cigarettes, drugs, alcohol, gambling and clubbing. Spending behaviour was

Table 1: Summary of FitnessModel Indexes

Goodness of FitIndex	X^2/df	CFI	IFI	GFI	RMSEA	Variables Deleted
MeasurementModel	2.66 (.000)	.849	.942	.849	.06	F. Satisfaction (6), F. Attitude (Security), CCE (1,4,5,6,9,10),
SEM Model	2.31(.000)	.935	.934	.923	.056	SSA (cell-phone) PSA (Mother) F.Strain (1,2,3,4,5)

computed by summing the items determined by the students. The higher the number of items the students spent money on, the lower the score and the lowest number of items received the highest score. Three items were adapted from the instruments of Hilgert, Hogarth and Beverly [25] and two items were added to measure savings behaviour based on the Malaysian context. The instrument included 5-items: "have own savings account", "saving times within six months", "saving for long-term", "saving for short-term" and "regarding financial condition in university, have enough money that can be put into savings". Savings behaviour was computed by summing the savings scores. The highest score indicated good savings behaviour and the lowest score indicated poor savings behaviour. Financial behaviour was measured by summing spending and savings behaviour; a higher score indicated effective financial behaviour and a low score indicated risky financial behaviour. Financial behaviour was entered to model as an observed variable. Researchers need to check the reliability along with the factor loading when they develop a scale.

Financial Strain: Financial strain in this study was measured by using an instrument involving ten items. The main financial strains listed were derived from a list used by the Financial Counselling Clinic at Iowa State University (2004), to determine the type of financial counselling required by students seeking financial counselling, which was adapted to the Malaysian context. Items for financial strain included issues relating to financial planning and cash flow management. Some statements for cash flow management were "Borrowing money from friends" and "Skip meals in order to save money" and for financial planning "Not aware how money was spent" and "Spending more than income gained". Respondents were required to rate the experience of these problems on a five-point Likert scale from never (1) to everyday (5). However, to enhance the fitness of the construct five items were dropped. The reliability score was .764.

Financial Literacy: Financial literacy was measured by testing for correct answers to 25 questions concerning financial goals, financial records, savings, investments, retirement, banking systems, time value of money, wills, insurance, education loans and general knowledge of personal finance. Since the measurement was a kind of test the construct contributed to the model as an observed variable.

Childhood Consumer Experiences: To measure this construct, a 10-item instrument was adopted from Hira's [26] instrument and adapted to the Malaysian context, sincethe Hira's scale was developed based on US context. The instrument was measured by asking the respondents to choose the age they started to practice each statement on a score answer from "<7 years old", "7-12 years old", "13-15 years old", "16-17 years old", ">18 years old" and "Never". The financial socialization score was computed by summing the score of statements from one to six for 10 items; however, the earlier age (< 7 years old) received the highest score (6) and never received the lowest score (1). To enhance the fitness of the construct six items were dropped. The reliability score was .544.

Primary and Secondary Socialization Agents: The measurement for this construct was taken from the studies of Hira [26] and John [27]. The instrument included 11 items, in which peer group, mass media, magazine, advertisements, the Internet and mobile phones were considered as secondary financial socialization agents. Primary socialization agents comprised father, mother, siblings, religion and school. To assess the influence of each item, respondents were required to rate the eleven items on a scale from 1 (not influence) to 10 (the most influence). The primary and secondary socialization agents' scores were computed by summing the scores of statements from one to ten for 11 items. A higher score for each dimension indicates a higher level of influence by the respective socialization agent. Furthermore, to enhance the fitting

of the construct one item was dropped from primary socialization agents and two items were dropped from the secondary socialization agents. The reliability score was .848.

Sample Procedure and Sample Profile: In selecting the sample, after receiving permission to conduct the study, first a list of Institutions of Higher Learning (IPT) of the Public Institutions of Higher Learning (IPTA) and Private Institutions of Higher Learning (IPTS) was made which was 40 [28] and then universities were stratified to public and private Malaysian universities. Furthermore, eleven institutions of higher learning were randomly selected, which consists of six IPTA and five IPTS universities from each stratum.A self-administered questionnaire was used as the data collection method. In selecting the sample, after receiving permission to conduct the study, first a list of Institutions of Higher Learning (IPT) of the Public Institutions of Higher Learning (IPTA) and Private Institutions of Higher Learning (IPTS) was made and then universities were stratified to public and private Malaysian universities. Furthermore, eleven institutions of higher learning were randomly selected, which consists of six IPTA and five IPTS universities from each stratum. After distributing the 3900 questionnaires to 11 universities, a total of 2,500 completed and usable questionnaires were returned. To enhance the accuracy of the results, Bentler and Chou [29] recommended that for meaningful and interpretable values for structural equation modelling (SEM), the ratio of 5-10 participants per estimated parameter rule be used to calculate the sample size. According to this rule and given the response rate of around 65%, a sample comprising 700 respondents was randomly selected from the original data set. The mean age of the respondents was 21 years and 43% were male and 56% were female students.

Data Analysis: Statistical testing of the initially proposed structural model yielded the following indicators for the overall model: (χ^2/df= 2.66, $p < 0.001$, CFI = .849; GFI = .849; RMSEA = .06) suggesting that the model could be improved. However, to enhance the fitting of the model some items were dropped (Table 1) and the fit of the adjusted model was better and deemed an acceptable fit (χ^2/df= 2.31, $p < 0.001$, CFI = .935; GFI = .923; RMSEA = .056). Furthermore, the mediating role of financial behaviour and financial strain on the relationship between childhood consumer experiences, primary and secondary socialization agents and financial literacy on financial satisfaction were examined. According to the classical definition of the mediator; a given variable may be said to function as a mediator to the extent that it accounts for the relation between the predictor and the criterion [29]. Therefore, in order to test the mediating effect of the research model the Baron and Kenny [30] approach was used.

RESULTS AND DISCUSSIONS

The results presented in Table 2, indicate that financial attitude (β= -.208, $p \leq .05$), childhood consumer experience (β= .114, $p \leq .05$), primary socialization agents (β= .115, $p \leq .05$), secondary socialization agents (β= .165, $p \leq .05$), financial literacy (β= .277, $p \leq .05$), financial behaviour (β= .288, $p \leq .05$) and financial strain (β= -.265, $p \leq .05$) significantly predict financial satisfaction among students. Results indicated that financial behaviour has the highest positive and direct effect on financial satisfaction. Moreover results of direct effects presented in Table 2 indicated that childhood consumer experience (β= -.108, $p \leq .05$), primary socialization agents (β= -.112, $p \leq .05$), secondary socialization agents (β= .405, $p \leq .05$), financial literacy (β= -.107, $p \leq .05$) and financial behaviour (β= -.325, $p \leq .05$) significantly predict financial strain. Assessment of results indicated that financial attitude has no effect on financial strain and secondary socialization agents with positive direction have the highest effect on financial strain. Results indicated that hoes more affected by secondary socialization agents such as peer, media and internet in financial matters are involved in higher level of financial strain.

Furthermore results of direct effects on financial behaviour revealed that childhood consumer experience (β= .218, $p \leq .05$), primary socialization agents (β= .104, $p \leq .05$), secondary socialization agents (β= -.194, $p \leq .05$), financial literacy (β= .207, $p \leq .05$) and financial attitude (β= -.14, $p \leq .05$) significantly predict financial behaviour. However results indicated that childhood consumer behaviour has the highest positive direct effect on financial behaviour, which means those with earlier and greater financial practice during childhood have greater financial behaviour. Results of total effect through financial behaviour and financial strain indicated that financial literacy indirectly through financial behaviour and financial strain has the highest positive effect on financial satisfaction. This finding indicated that those students with higher level of financial literacy perform better financial behaviour and have lower level of financial

Table 2: The Results of Standardized Path Coefficients for Financial Behaviour and Financial Strain Predictors

			Direct Effect	Indirect effect	Total Effect
Direct Path					
Financial attitude	==▸	Financial behavior	-.14	0	-.14
Childhood consumer experience	==▸	Financial behavior	.218	0	.218
Financial literacy	==▸	Financial behavior	.207	0	.207
Primary socialization agents	==▸	Financial behavior	.104	0	.104
Secondary socialization agents	==▸	Financial behavior	-.194	0	-.194
Financial attitude	==▸	Financial strain	0	0	0
Childhood consumer experience	==▸	Financial strain	-.108	0	-.108
Financial literacy	==▸	Financial strain	-.107	0	-.107
Primary socialization agents	==▸	Financial strain	-.112	0	-.112
Secondary socialization agents	==▸	Financial strain	.405	0	.405
Financial behavior	==▸	Financial strain	-.325	0	-.325
Financial attitude	==▸	Financial satisfaction	-.208	0	-.208
Childhood consumer experience	==▸	Financial satisfaction	.114	0	.114
Financial literacy	==▸	Financial satisfaction	.277	0	.277
Primary socialization agents	==▸	Financial satisfaction	.118	0	.118
Secondary socialization agents	==▸	Financial satisfaction	.165	0	.165
Financial behavior	==▸	Financial satisfaction	.288	0	.288
Financial strain	==▸	Financial satisfaction	-.265	0	-.265
Indirect path effects through financial behaviour					
Financial attitude --▸ Financial behavior -▸ Financial Satisfaction			-.153	-.066	-.219
Childhood consumer experience-▸ Financial behavior-▸ Financial Satisfaction			.113	.097	.21
Financial literacy --▸ Financial behavior -▸ Financial Satisfaction			.266	.084	.35
Primary socialization agents --▸ Financial behavior -▸ Financial Satisfaction			.117	.036	.153
Secondary socialization agents-▸ Financial behavior -▸ Financial Satisfaction			.148	-.09	.058
Indirect path effects through financial strain					
Childhood consumer experience--▸ Financial strain -▸ Financial Satisfaction			.113	.076	.189
Financial literacy --▸ Financial strain -▸ Financial Satisfaction			.266	.061	.327
Primary socialization agents --▸ Financial strain -▸ Financial Satisfaction			.117	.048	.165
Secondary socialization agents --▸ Financial strain -▸ Financial Satisfaction			.148	-.145	.003

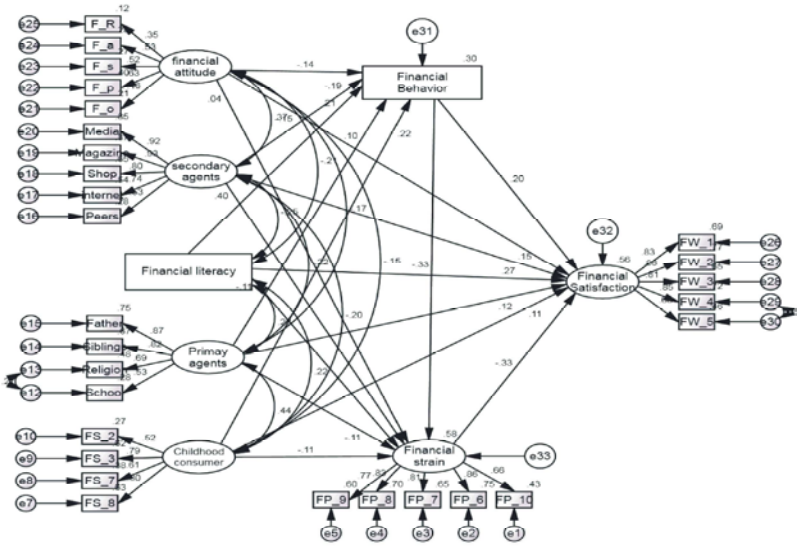

Fig. 1: Financial satisfaction model

strain which in turn resulted in higher level of financial satisfaction. Furthermore results of indirect effects through financial strain indicated that while financial attitude has no effect on financial strain, but indirectly through financial behaviour has fairly high negative effect on financial satisfaction. This effect indicated that those students with negative attitude toward money performed more risky financial behaviour which resulted in lower level of financial satisfaction (Figure 1).

Test of the Mediating Effects: The mediation approach of Baron and Kenny [30] was adopted to identify the mediating effect of financial behaviour and financial strain on the relationship between childhood consumer experiences, primary and secondary socialization agents, financial literacy and financial attitude with financial satisfaction. The general test for mediation is to examine the relation between the predictor and the criterion variables (dependent variable), the relation between the predictor and the mediator variables and the relation between the mediator and criterion variables. All of these correlations should be significant. The relation between the predictor and criterion (dependent variable), should be reduced (to zero in the case of total mediation) after controlling the relation between the mediator and criterion variables [30]. A comparison between the direct effect of the predictor on the criteria in the absence and presence of the mediator is the main determinant of the mediation effect.

Mediating Effect of Financial Behaviour: The assessment of the direct relationship of assumed factors with financial satisfaction reveals that childhood consumer experiences (b= .113, CR= 2.892, p<.00), financial attitude (b= -.153, CR= -3.53, p<.00), financial literacy (b= .266, CR= 2.826, p<.00), primary (b= 117, CR= 3.106, p<.00) and secondary socialization agents (b= 148, CR= 3.55, p<.00), have significant effect on financial satisfaction and to assess the mediation effect these relationships were examined in presence of financial behaviour as well. Findings revealed in Table 2, indicated that in presence of financial behaviour all the relationships are still significant while the direct effects are decreased. This reduction in direct effects indicated on partial mediation effect of financial behaviour.

Mediating Effect of Financial Strain: The assessment of the direct relationship of childhood consumer experiences (b= .113, CR= 2.892, p<.00), financial attitude (b= -.153, CR= -3.53, p<.00), financial literacy (b= .266, CR= 2.826, p<.00), primary (b= 117, CR= 3.106, p<.00) and secondary socialization agents (b= 148, CR= 3.55, p<.00) with financial satisfaction reveals that all assumed factors have significant relationship. However since there was no relationship between financial attitude and financial strain therefore it excluded from mediating test. Results revealed that all factors effect on financial satisfaction was decreased with presences of financial strain, which indicated on partial mediation effect of financial strain on the relationship between assumed factors and financial satisfaction.

The partial mediation role of financial behaviour and financial strain on the relationship between childhood consumer experiences financial attitude, financial literacy, primary and secondary socialization agents with financial satisfaction indicate that while childhood consumer experiences, financial literacy, financial attitude (in case with mediation effect of financial behaviour), primary and secondary socialization agents may have a direct effect on determining the financial satisfaction, but in the other hand financial behaviour and financial strain may have an intervention effect on these relationship as well. In other words, earlier childhood consumer experiences, higher level of financial literacy, higher effect of primary agents may results in greater financial behaviour which in turn resulted in higher level of financial satisfaction.

CONCLUSIONS AND IMPLICATIONS

The findings of this study indicate that financial behaviour is the main determinant of financial satisfaction among students, which confirm the previous studies results such as Joo and Grable [3], Xiao *et al*. [5]. Furthermore results revealed that childhood consumer experiences is the main determinant of students financial behaviour which indicated that involvement in financial and consumer practices during childhood may have an important effect on future financial practices and behaviour. As Shim *et al*. [14] emphasized, financial matters, similar to other issues, are learned during childhood and primarily from parents through observation and contribution in financial practices. More importantly results revealed that secondary socialization agents have the highest effect on financial strain, which those students were more affected by secondary socialization agents such as peer, media and internet were involved in higher level of financial problem and strain and were fail to manage their expenses. In respect of this finding, the implications for family economics and financial educators are apparent, given the vital role of childhood

consumer practices financial issues and the negative effect of peers, media and the Internet. In addition, the findings confirm the role of childhood financial practices emerging as financial behaviour in later life; therefore, parents might understand their crucial role in the financial life of their children. The understanding of families concerning the significance of financial practices in respect of the development of financial skills and financial literacy might have an important effect on the development of financial habits among youth. Furthermore, results of total path coefficients revealed the high effect of financial literacy on improvement of financial satisfaction. Results indicated that higher level of financial literacy caused in greater financial behaviour and lower level of financial strain which in turn resulted in higher level of financial satisfaction. This finding ay appreciate by financial educators to improve schools financial literacy programmes and expand practical subtitles to enhance all students' financial literacy and abilities. An effective financial literacy programme should teach the fundamental knowledge and financial techniques together with ways to improve self-efficacy, as this can help control the effect of peers and advertisements, as well as life skills and methods for the wise and even righteous use of financial resources. In respect of the mediating effect of financial behaviour and financial strain in the relationship between childhood consumer experiences, financial attitude, financial literacy, primary and secondary socialization agents and financial satisfaction support the importance of financial practices and information that children learn within the family sphere. In addition financial attitude revealed a strong negative influence on financial behaviour, which indicated on the effect of money values and beliefs on financial practices. According to Falahati and Paim [16] childhood consumer experiences and socialization agents including family and peer and media are the main source of money attitude formation among students, which based on present study findings negative attitude may involve students in more risky behaviour and decreases the financial satisfaction accordingly. These findings indicated that financial values and beliefs which learned primarily during childhood and mostly within family context are the basic elements for future financial habits and practices. It should be noted that financial literacy, practice and beliefs attained during childhood and, consequently, the ?nancial independence that young adults establish, may affect their lives in profound ways, not only in the realms of ?nancial and economic wellbeing, but also with regard to their on-going relations with family, friends and associates. More importantly, since university students experience an independent life in university, those with a higher level of financial literacy may have better and more success in financial management. Therefore, policy makers may pay more attention to providing more education opportunities for students. There are various sources that students can tap into to acquire financial knowledge, such as attending seminars, workshops, courses and even pamphlets. All of these sources can be beneficial as they help provide basic financial management knowledge and skills during university life and before the student graduates and enters the job market, so they are equipped with the skills necessary to manage their income efficiently.

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